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Employment Survey of 1982 Graduates of Ontario Universities: Summary Report

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Employment Survey of 1982 Graduates of Ontario Universities: Summary Report

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Introduction

This document is a non-technical, summary version of a larger report published by the Ministries of Education/Colleges and Universities, Ontario, under the title Employment Survey of 1982 Graduates of Ontario Universities: Report of Major Findings. It is intended primarily for use by secondary-school, colleges of applied arts and technology, and university administrators, counsellors, and teachers as a source of information on the spring graduates of university-level institutions and is based on information gathered from graduates' responses to a mail questionnaire. The 1982 survey was a replication of the one conducted on the 1979 spring graduates and was intended to provide data on the postgraduate educational and labour-market experiences of the spring 1982 graduates within a year of their graduation. Considered alone, the survey of 1982 graduates provides an overview of Ontario's university-level system of postsecondary education--of how it recruits, trains, and certifies, and of how it articulates with labour markets. Considered with information from other sources, including the survey of 1979 graduates, it provides evidence of certain short-run changes in that system.

The verbal and graphic presentation in this summary is intended to provide an accessible précis for those who do not require the more detailed analyses and elaborate statistical summaries presented in the full report. The Employment Survey of 1982 Graduates of Ontario Universities: Report of Major Findings will be published and available in the spring of 1984.

Highlights

Some of the highlights of the analysis of the data gathered on 1982 spring graduates from Ontario universities include indications that:

- approximately equal numbers of men and women graduate from university-level institutions in Ontario;

- the parents of university-level graduates are, on average, better educated than adults between the ages of 45 and 64 in Ontario;

- those graduates whose parents are relatively well educated do not differ from those whose parents are relatively poorly educated in terms of level of degree obtained, major field of study, salaries earned, or job satisfaction achieved;

- 88.8 per cent of the 1982 Ontario graduates who are in the labour force are employed full or part time;

- the unemployment rate for 1982 graduates in the spring of 1983 was 11.2 per cent compared with an overall unemployment rate of 18.7 per cent among Ontarians aged 20-24 years;

- the unemployment rate in the spring of 1983 was 12.7 per cent for male graduates and 9.3 per cent for female graduates;

- graduates with one-year Bachelor of Education, first professional, master's, and Ph.D. degrees are more likely than the others to be in the labour force and employed full time;

- at the time of the survey, 21.2 per cent of 1982 spring graduates were enrolled as full-time students;

- holders of a one-year Bachelor of Education degree who are in the labour force are more likely to be employed part time (26.2 per cent) than graduates with other qualifications;

- over 50 per cent of graduates employed full time are employed in just twenty-one occupations, the four most common of which are accountants, auditors, and other financial officers (8.1 per cent), elementary and kindergarten teachers (5.9 per cent), computer programmers (4.8 per cent), and lawyers and notaries (3.7 per cent);

- among university graduates, the higher the level of diploma or degree, the higher the earnings;

- current average full-time salaries vary across the major fields of study, ranging from a low of $15 740 (fine and applied arts) to a high of $25 236 (health professions and occupations);

- those fields which are characterized by above-average salaries are: health professions and occupations, engineering and applied sciences, mathematics and physical sciences, education, recreation and leisure, and commerce and business administration;

- male graduates had both higher starting and higher current full-time salaries than female graduates;

- 79.1 per cent of all graduates employed full time indicate that they are satisfied with their most recent job or position;

- graduates typically employed several different strategies in searching for a job, ranging from registration with private employment agencies and answering media advertisements to walk-in contacts with prospective employers;

- job-search strategies varied in effectiveness in terms of generating job offers. Assistance from co-operative or internship employers or former employers was the most successful strategy while seeking assistance from off-campus Canada Employment Centres and private employment agencies were the least successful strategies;

- 87.1 per cent of all graduates employed full time felt that, in terms of general skills learned, their jobs were related to the field of study of their most recent degree;

- recipients of one-year Bachelor of Education and first professional degrees stood out among those whose qualifications seemed to relate closely to their jobs whereas holders of three-year bachelor's degrees ranked relatively low in this regard;

- graduates in the health professions and occupations and in engineering and applied sciences appeared to be more able to translate their educational qualifications into jobs in their fields, while those in fine and applied arts, the humanities, and the social sciences did not fare as well in this regard.

Purpose of the Survey

The 1982 Ontario graduate employment survey gathered data on certain demographic and social-background characteristics for spring graduates. Information was also collected on diploma or degree level, major field of study, type of program, decisions for further education, job-search procedures and experiences, employment status, initial and subsequent occupational choices (including the educational requirements for those jobs), starting and current salaries, job satisfaction, migration, and parents' education.

This survey can provide information for policy-makers with regard to postsecondary education in Ontario. It is a source of basic statistical data for universities, other Ontario ministries, Statistics Canada, and researchers. Also the findings are potentially useful to those involved in career counselling and graduate placement.

Research Design and Fieldwork Procedures

The 1982 graduate employment survey was conceived and conducted so that it complements its 1979 counterpart in terms of research design, fieldwork procedures, and information obtained. The study population for the survey was the spring 1982 graduates of the fifteen Ontario universities, the Ontario College of Art, and Ryerson Polytechnical Institute. Visa students were not included. The research design called for each graduate to be sent a questionnaire. (Although the enumeration was less than complete, the non-response biases were nominal across province-wide strata, e.g., gender, institution, degree level, etc.) Thus, the data obtained describe the entire population directly and not just a sample. For this reason, no tests of statistical significance needed to be performed or confidence intervals estimated. A mail questionnaire was used which differed only slightly from the 1979 version in content and format. The first mailing began during the last week of February 1983 and was completed during the first two weeks of March. A total of 33 425 questionnaires were mailed. The goal was an overall response rate of between 55 and 60 per cent; in fact, the final response rate was 58.3 per cent.

Profile of the 1982 Spring Graduates

This section provides a profile of the respondents in terms of selected demographic and social-background characteristics, aspects of their educational experiences, and features of their early career paths.

Gender

Approximately the same number of males and females are graduating from university-level institutions in Ontario. In the 1982 survey 52.3 per cent of the respondents were female. In the 1979 survey 49.8 per cent were female.

Age

Canadians who undertake university-level education typically do so as a direct continuation of their secondary-school training. This means that the bulk of Canadians who continue their studies at the university level begin in their late teenage years and finish in their early twenties. In the 1982 survey, approximately 66 per cent of the respondents fell in this category. This percentage is virtually identical to that which emerged from the analysis of the corresponding figures for the 1979 respondents.

Parents' Education

The data indicate that 23.4 per cent of the respondents came from families in which neither parent completed secondary school, and that 30.5 per cent came from families in which at least one parent had completed a bachelor's degree or higher. Since this information was not sought in the 1979 survey, it is not possible to comment upon what changes might have occurred in this regard in the 1979-82 period.

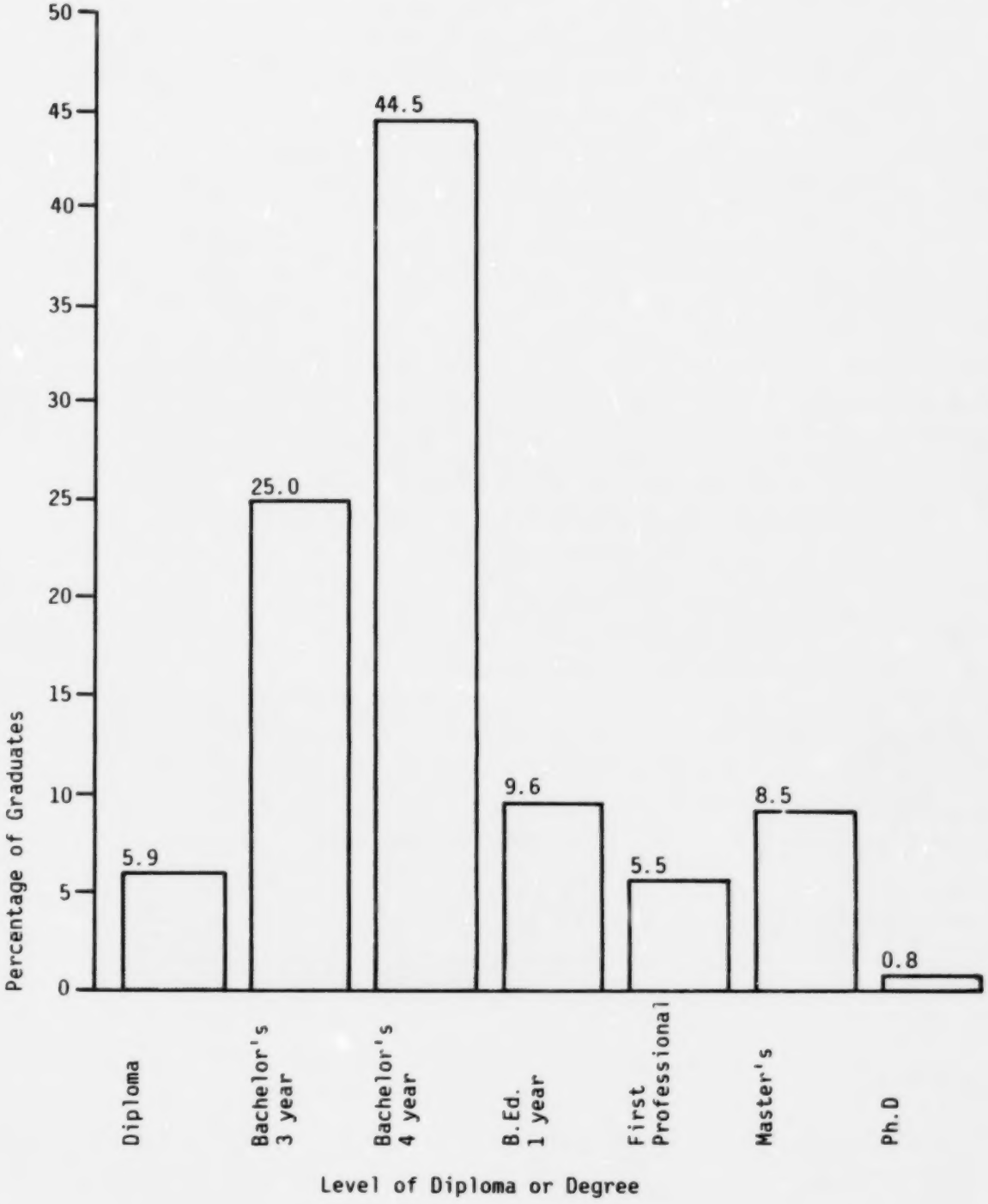
Comparing educational background of the parents of the graduates with Ontario men and women in the same general age category reveals that the parents of 1982 graduates are better educated on the average. For example, according to 1981 Census 64.4 per cent of Ontarians aged 45-64 had secondary school graduation or lower and 6.8 per cent of this group had a Bachelor's degree or higher. For 1982 graduates, however, 39.0 per cent of their parents had secondary school graduation or lower and 30.4 per cent had a Bachelor's degree or higher.[1]

Level of Diploma or Degree

Among the respondents to the survey, 79.1 per cent earned bachelor's degrees, 5.5 per cent first professional degrees, and 9.3 per cent either a master's degree or a Ph.D. When compared with the corresponding data from the 1979 survey, these percentages may indicate a change in the profile of graduates from the Ontario system of postsecondary, university-level education. First, there has been a shift towards four-year bachelor's degrees, with movement away from three-year bachelor's degrees and master's degrees. Second, there has been a slight increase in professional degrees and a small decrease in Ph.D.s (see Chart 1).

1. In calculating this percentage the parent with the higher educational qualification was used.

CHART 1
1982 Graduates by
Level of Diploma or Degree*



* Percentages do not add to 100 per cent since the other category (0.2 per cent) has not been included.

Major Field of Study

The distribution of 1982 graduates across major field of study shows that the largest number of respondents graduated from social sciences (23.6 per cent) while the fewest came from fine and applied arts (3.7 per cent). In general, a comparison of these data with those from 1979 shows only small changes. There has been, however, an increase of 3.7 per cent in the representation of graduates in commerce and business administration (see Chart 2).

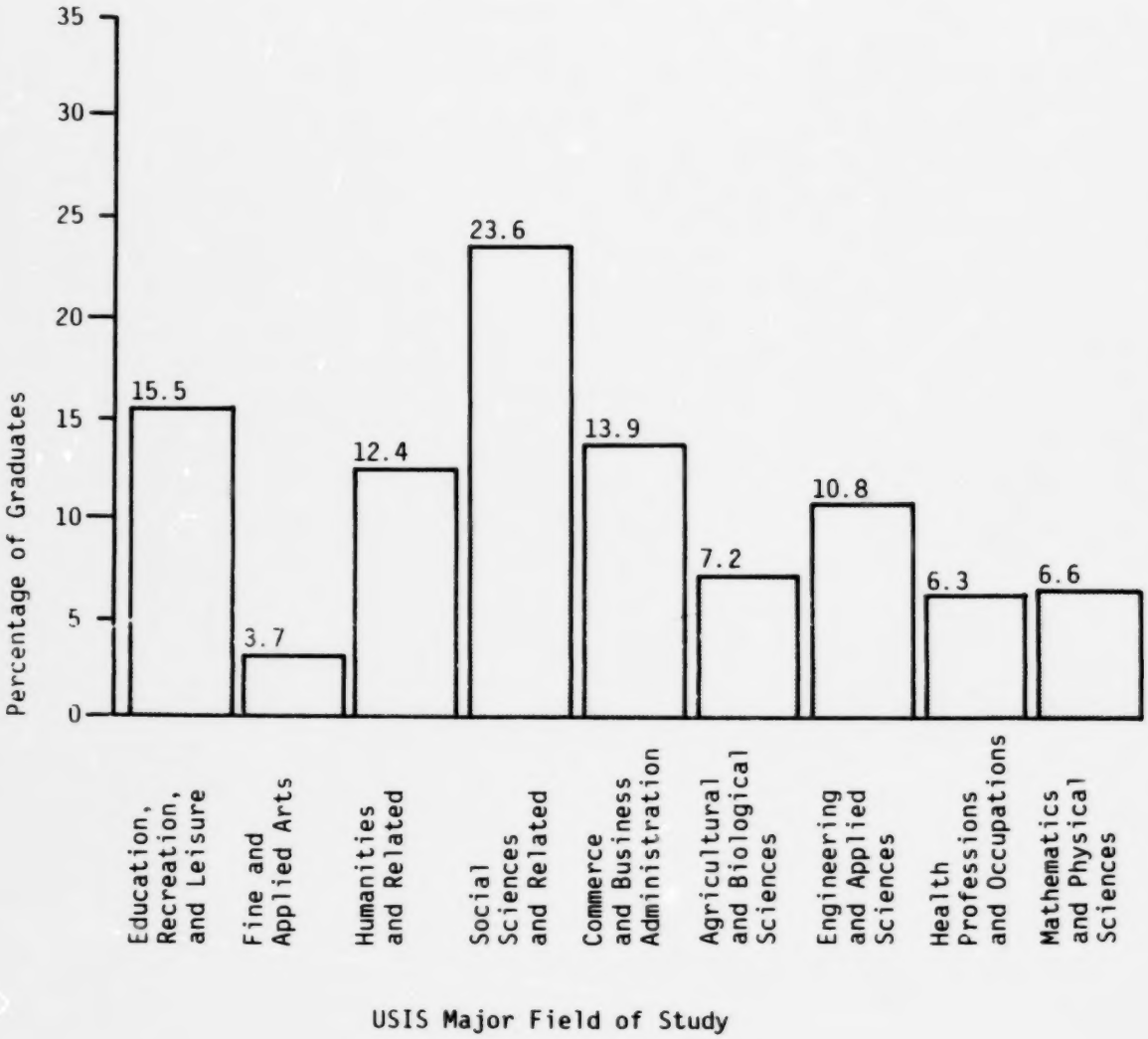
Type of Program

The distribution of the 1982 spring graduates in terms of type of program indicates that 81.5 per cent completed their courses of study in regular programs, 4.2 per cent in co-operative programs, and the remainder in regular programs which required some kind of work experience or internship. These findings are virtually the same as for the 1979 graduates.

Enrolment Status

Some 82.5 per cent of the graduates in 1982 completed their courses of study as full-time students only, 8.2 per cent did so either as part-time or extension students only, and the remainder combined full-time enrolment with either part-time or extension status. A comparison of these data with those for the 1979 graduates shows an increase in the relative representation of students in the full-time-only category of 1.6 per cent.

CHART 2
1982 Graduates by USIS Major Field of Study[1]



1. USIS - University Statistical Information System

Employment Status

The labour force participation rate of 1982 graduates in the spring of 1983 was 84.3 per cent with 15.7 per cent of graduates not in the labour force. The unemployment rate was 11.2 per cent for graduates compared with 18.7 per cent for Ontarians aged 20-24 during this same time period.[1]

The 1979 graduates had a labour force participation rate of 79.5 per cent in the spring of 1980 with 20.5 per cent not in the labour force. The unemployment rate of 5.8 per cent for graduates compared with 10.7 per cent for Ontarians aged 20-24.[2]

Of those graduates not in the labour force, 84.7 per cent had returned to full-time studies.[3] Only 15.3 per cent were engaged in other activities (this includes some graduates engaged in part-time studies). At the time of the survey 21.2 per cent of all 1982 graduates reported that they were full-time students. This calculation includes graduates who reported that they were both full-time students and in the labour force.

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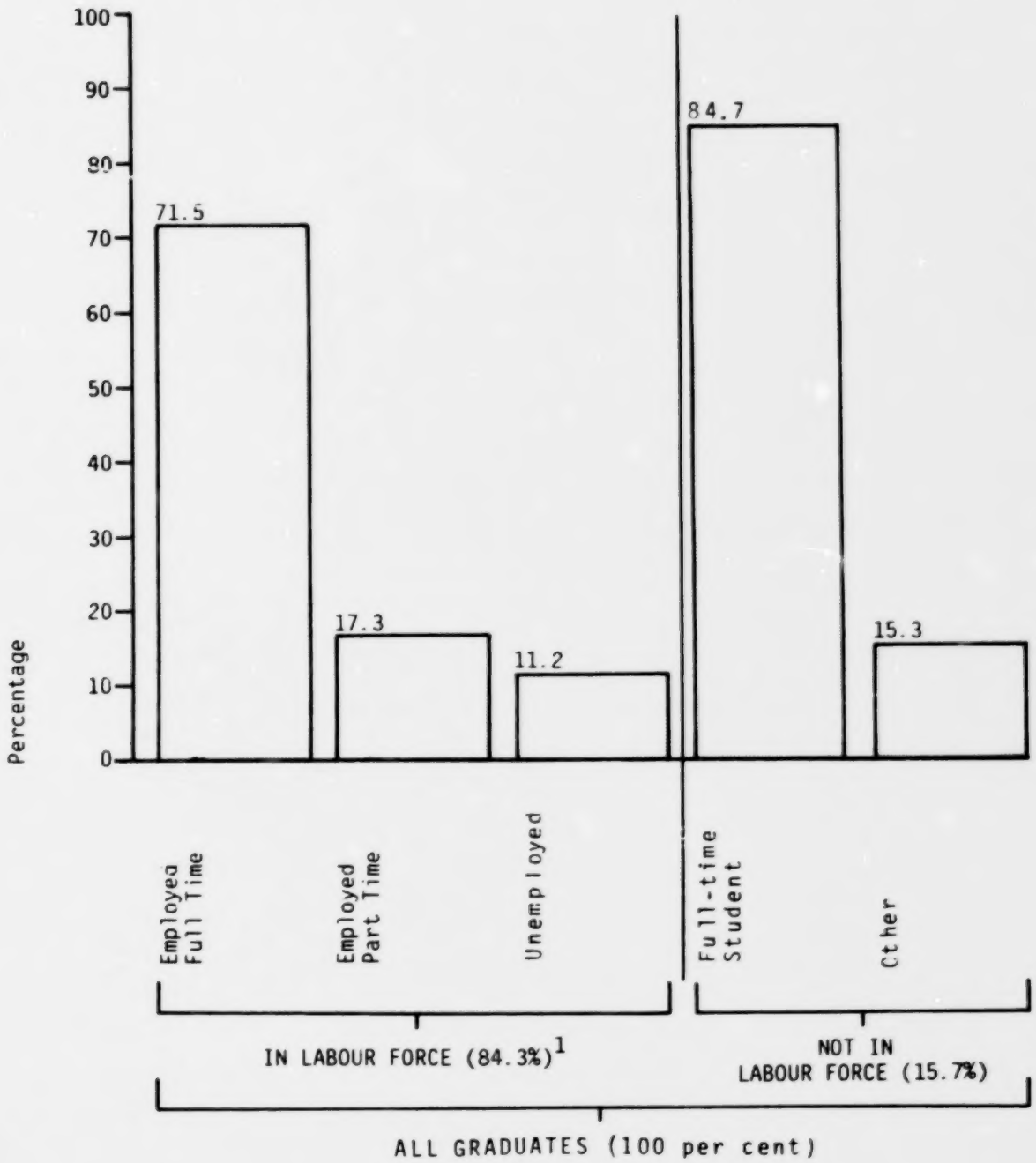
1. Statistics Canada, unpublished data from the Labour Force Survey. This percentage was obtained by averaging the unemployment rates for March, April, May and June 1983, the months graduates were surveyed.

2. The participation and unemployment rates for 1979 graduates have been recalculated to match the methodology used in this report and in the Labour Force Survey. Articling lawyers and medical interns are included in the labour force.

3. Calculations of those not in the labour force and for full-time students exclude articling lawyers and medical interns.

CHART 3

1982 Graduates by Employment Status, Spring 1983



Note: Some Graduates in the Labour Force are also Full-time Students.

Occupation

The twenty-one most common occupations found among the 1982 graduates collectively account for 51.7 per cent of all those currently employed (see Table 1). The most common occupational group is that of accountants, auditors, and other financial officers (6.8 per cent of the employed graduates) followed, in turn, by elementary and kindergarten teachers (5.5 per cent) and computer programmers (4.0 per cent). Since occupation was not coded at this level of detail in the 1979 survey, no detailed comparisons are possible between the present and the earlier survey.

The occupational classification scheme most widely used in Government of Canada publications, including the census, is based on the division of occupations into the major groups listed in the Canadian Classification and Dictionary of Occupations (CCDO). The percentage distribution of the employed 1982 graduates across the twenty-two CCDO major groups reveals that 52.8 per cent are located in just three: teaching and related fields (20.8 per cent), natural sciences, engineering, and mathematics (16.4 per cent), and managerial, administrative, and related (15.6 per cent).

Industry

Just as the 1982 respondents tend to be concentrated in a relatively small number of broad occupational categories, so they are more likely to be employed in certain industrial divisions than in others. The data show that 24.7 per cent are found in the educational service division while 71.9 per cent are located in one of the four other largest Standard Industrial Classification (SIC) divisions: manufacturing, business service, government service, and health and social service.

Table 1
Full- and Part-time Employed 1982 Spring Graduates
in Each of the Twenty-One Most Common Current Occupations[1]

CCDO	Title	Percentage
1171	Accountants, auditors, and other financial officers	6.8
1179	Occupations related to management and administration n.e.c.[2]	1.7
2143	Civil engineers	1.3
2144	Electrical engineers	1.9
2147	Mechanical engineers	1.7
2183	Computer programmers	4.0
2331	Social workers	1.5
2333	Occupations in welfare and community services	1.4
2343	Lawyers and notaries	3.2
2700	Supply teachers	2.5
2719	University teaching or research assistants	2.3
2730	Teacher, unspecified	3.2
2731	Elementary and kindergarten teachers	5.5
2733	Secondary teachers	2.8
2795	Teachers of exceptional students	1.4
3111	Physicians and surgeons	2.0
3131	Nurses, graduate, except supervisors	2.6
3137	Physiotherapists, occupational and other therapists	1.3
4111	Secretaries and stenographers	1.8
5130	Supervisors: sales occupations, commodities	1.3
5135	Salesmen and salespersons, commodities, n.e.c.[2]	1.5
Total		51.7

1. This list pertains to 51.7 per cent of respondents who were full- or part-time employed.

2. n.e.c. means not elsewhere classified.

Another way to categorize industries is simply to distinguish between those which are part of the private sector and those which belong in the public sector. The latter category includes not only public administration, but also the full range of government-sponsored education, health, and other services, and Crown corporations. According to this classification by sector, 48.7 per cent of the 1982 graduates were employed in the public sector at the time of the survey, with the remaining 51.3 per cent in the private sector.

Employment Earnings

The average annual earnings for all full- and part-time graduates was $19 980. Because of the inflation of the Canadian dollar and the differences between the 1979 and 1982 graduates in the percentage employed full time, no simple comparisons can be made between the two surveys in terms of the relative earning power of graduates.

Migration

Of the employed 1982 graduates who responded to the survey, 89.0 per cent had jobs in Ontario, 0.4 per cent had relocated to the United States, 0.2 per cent had moved to other parts of the world, and the remainder had located elsewhere in Canada, primarily in Alberta and Quebec.

Some Social and Academic Factors in the Educational and Early Career Decisions of the 1982 Spring Graduates

In this section of the report, we examine the extent to which certain of the graduates' educational and early career decisions are related to the factors of demography, social origins, and academic choices.

Level of Diploma or Degree

As we have seen, men and women graduate in about equal numbers from university-level institutions in Ontario. The men and women of the class of 1982, however, differ in degree level. Specifically, more women are holders of three-year bachelor's and one-year Bachelor of Education degrees, while more men are the recipients of diplomas, four-year bachelor's, first professional, master's, and Ph.D. degrees.

Are the educational experiences of university graduates influenced by their parents' educational achievements? Apparently not, at least as far as level of diploma or degree is concerned. A systematic and detailed analysis of the relationships between mother's, father's, and combined mother's and father's educational level, on the one hand, and respondent's level of diploma or degree, on the other, failed to turn up any evidence that the latter depended in any consistent way upon the former.

Major Field of Study

A little-studied aspect of people's educational choices is the particular fields in which they chose to specialize. What, then, are some of the factors that seem to determine people's decisions in this regard? Here we examine some possible demographic and social-background influences on people's decisions to pursue particular fields of study.

Male and female spring graduates of 1982 differ in the levels of their degrees and also in their major fields of study. In particular, more men graduated in the fields of commerce and business administration, engineering and applied sciences, and mathematics and physical sciences, and more women in the fields of education, physical education, recreation and leisure, fine and applied arts, humanities, social sciences, and health professions and occupations. There is little difference in the relative representation of the sexes in the field of agricultural and biological sciences.

Just as parents' education was not found to be consistently related to the level of diploma or degree earned by the graduates of 1982, so, too, it was not found to be related in any obvious way to major field of study. In fact, parents' education appeared to be largely unrelated to any significant aspect of the academic choices or early career decisions of the class of 1982.

Employment Status

Graduates from Ontario's university-level educational system typically pursue one of two courses upon receipt of their degrees: they either move into the labour force or continue their studies. At the same time, there are variations within this pattern, including whether those who are employed work full time or part time and whether those who seek employment manage to find it immediately.

What differences are there, then, between men and women graduates in terms of employment status? First, approximately equal proportions of male and female graduates were in the labour force, although proportionately more men were employed full time and more women part time. Second, proportionately more men than women were not employed but were looking for a job. A slightly higher proportion of women than men were not employed and not looking for a job. When the number of men and women who are unemployed is expressed as a percentage of the labour force, the unemployment rate for women (9.3 per cent) was considerably lower than that for men (12.7 per cent).

Holders of one-year Bachelor of Education, first professional, master's, and Ph.D. degrees have higher rates of labour-force participation and lower rates of unemployment than do holders of three- or four-year bachelor's degrees or diplomas (see Table 2).

Holders of first professional, master's, and Ph.D. degrees are much more likely than the others to be employed full time, and holders of three-year bachelor's degrees are the least likely to have full-time jobs. As for part-time employment, the degree level which stands out is that of the one-year Bachelor of Education. Among holders of that degree, 26.2 per cent were employed part time in the spring of 1983.

About 30.7 per cent of the recipients of three-year bachelor's degrees and 25.4 per cent of the recipients of four-year bachelor's degrees were enrolled as full-time students in the year after graduation, followed at some distance by holders of diplomas (13.6 per cent), master's (9.9 per cent), first professional (4.2 per cent), one-year Bachelor of Education (3.7 per cent), and Ph.D. (2.8 per cent) degrees.

Table 2

Labour Force Participation and Unemployment Rates of 1982 Spring Graduates by Level of Degree or Diploma (Spring 1983)

Level of Diploma or Degree	Labour Force Participation Rate (per cent)	Unemployment Rate (per cent)
Diploma	84.2	12.2
3-year Bachelor's	64.5	15.0
4-year Bachelor's	73.0	12.8
1-year B.Ed.	95.3	5.1
First Professional	94.4	2.6
Master's	88.2	6.3
Ph.D.	96.5	6.4
Other	85.1	23.4
Weighted N 33,043		

Graduates of health professions and occupations, commerce and business administration, and education, physical education, recreation and leisure have higher rates of labour force participation and lower rates of unemployment than do graduates from other fields of study (see Table 3).

With regard to full-time employment, health professions and occupations and commerce and business administration graduates stand above graduates in other fields in terms of the percentage who are employed full time, while those in agricultural and biological sciences, humanities, and fine and applied arts stand below the rest. As for part-time employment, the fields of education, physical education, recreation and leisure, and fine and applied arts are distinguished from the others in terms of the high percentages who are employed part time. Finally, in the full-time-student category, agricultural and biological sciences, humanities, and social sciences have higher than average representation, while health professions and commerce and business administration have lower than average representation.

Table 3

Labour Force Participation and Unemployment Rates of 1982 Spring Graduates by USIS Major Field of Study (Spring 1983)

USIS Major Field of Study	Labour Force Participation Rate (per cent)	Unemployment Rate (per cent)
Education, Physical Education, Recreation and Leisure	86.1	6.0
Fine and Applied Arts	70.4	17.2
Humanities	61.9	13.6
Social Sciences	69.6	12.5
Commerce and Business Administration	89.3	9.5
Agricultural and Biological Sciences	60.4	15.3
Engineering and Applied Sciences	81.2	15.5
Health Professions and Occupations	92.4	2.2
Mathematics and Physical Sciences	76.2	12.5
Weighted N 33,000		

Occupation

For most people, formal education is a means of entry to an occupation. It should prove informative, then, to analyse the kinds of occupations the 1982 graduates had in the spring of 1983. The data indicate a pattern wherein men are concentrated in certain occupations and women in others. In the list of the twenty-one most common current occupations of the graduates, there is only one occupation--that of secondary-school teacher--in which men and women are approximately equally well represented. This is followed at some distance by occupations related to management and administration n.e.c., physicians and surgeons, financial-management occupations, and computer programmers. There are some clear differences between the male and female occupational distribution, even when broad major categories are used. The largest of these differences is for the major group of natural sciences, engineering, and mathematics where there is a higher proportion of men (28.9 per cent as compared to 9.2 per cent for women); the second largest difference is for the major group of teaching and related fields where there is a higher proportion of women (23.8 per cent as compared to 10.0 per cent for men).

Although there is considerable overlap, holders of different levels of diplomas or degrees often compete in quite different markets for jobs. Of recipients of three-year bachelor's degrees, 23.3 per cent were employed in clerical occupations at the time of the survey. Recipients of four-year bachelor's degrees were concentrated in a relatively smaller number of major occupational groups, with 53.8 per cent in the major groups of managerial, administrative and related fields, and natural sciences, engineering, and mathematics. Most concentrated were holders of one-year Bachelor of Education degrees, 90.8 per cent of whom were in the major group of teaching and related occupations. Recipients of first professional degrees were concentrated almost entirely in the major groups of social sciences and related fields and medicine and health. Those persons who had earned master's degrees were fairly highly concentrated, with 37.4 per cent in managerial, administrative and related and 37.3 per cent in either social sciences or teaching. Some 39.9 per cent of those with Ph.D.

degrees were in the major group of teaching and related fields, with the remainder distributed across the categories of managerial, administrative, and related fields, natural sciences, engineering and mathematics, and social sciences and related fields. Finally, holders of diplomas or certificates tended to be relatively unspecialized, being distributed across several major groups with natural sciences, engineering, and mathematics the fields most frequently represented.

In five of the fields (education, recreation and leisure; commerce and business administration; engineering and applied sciences; health professions and occupations; and mathematics and physical sciences), the majority of graduates are found in a single occupational major group (e.g., 93.1 per cent of graduates in health professions and occupations have occupations in medicine and health). In four of these fields, however, graduates are much more widely scattered occupationally. Fine and applied arts graduates, along with those in the humanities, social sciences, and agricultural and biological sciences, do tend to be found in artistic, literary, or performing-arts occupations, clerical occupations, social-science occupations, and natural-science occupations. But the overwhelming majority in each case is distributed across a number of other major categories. For example, 22.9 per cent of the graduates in the humanities reported having occupations of a clerical nature. An additional 14.5 per cent reported occupations in the artistic, literary, or performing arts. A further 12.9 per cent were involved in teaching. Another 11.3 per cent were engaged in managerial or administrative work. And 10.9 per cent had occupations in the social sciences.

Earnings from Employment

It is informative to analyse the earnings of the 1982 graduates. So as to provide some perspective in time, as well as to cast light on the processes involved when people first take on employment after graduation, both starting and current salaries and wages have been examined.

In general, the higher the degree level, the higher the average salary or wage, with Ph.D.s earning more than half again as much as diploma holders (see Chart 4). The overall increase from starting to current salary was about 20 per cent. Holders of first professional degrees showed an increase of only about 5 per cent, while recipients of Bachelor of Education (one-year) degrees had current salaries which were about 11 per cent above their starting salaries. Holders of three-year bachelor's and Ph.D. degrees had current salaries which were about 28 per cent higher than their starting ones.

Average starting salaries span a range from $12 575 (fine and applied arts) to $23 658 (health professions and occupations). That is, those in the lowest category earned on the average about 50 per cent as much as those in the highest one. The corresponding range for current salary is somewhat narrower than for starting salary, running from $15 740 (fine and applied arts) to $25 236 (health professions and occupations). Chart 5 includes those fields which are characterized by above-average salaries: health professions and occupations; engineering and applied sciences; mathematics and physical sciences; education, recreation and leisure; and commerce and business administration.

Men, tend to have higher salaries on average than women. These differences are such that the average annual earnings for women are about 85 per cent of those for men.

As in the case of diploma or degree level, increases from starting to current salary vary across fields of study. Graduates in humanities, social sciences, education, recreation and leisure, and fine and applied arts all registered above-average increases in this regard, while graduates in agricultural and biological sciences, mathematics and physical sciences, commerce and business administration, engineering and applied sciences, and health professions and occupations showed below-average increases. The largest starting to current salary gains were registered by graduates in humanities (30 per cent), education, recreation and leisure (27 per

cent), and social sciences (27 per cent), while the smallest were shown by those in health professions and occupations (7 per cent) and engineering and applied sciences (12 per cent).

CHART 4:
1982 Graduates by Current Average Salary or Wage
and Level of Diploma or Degree,
Full-Time Employed

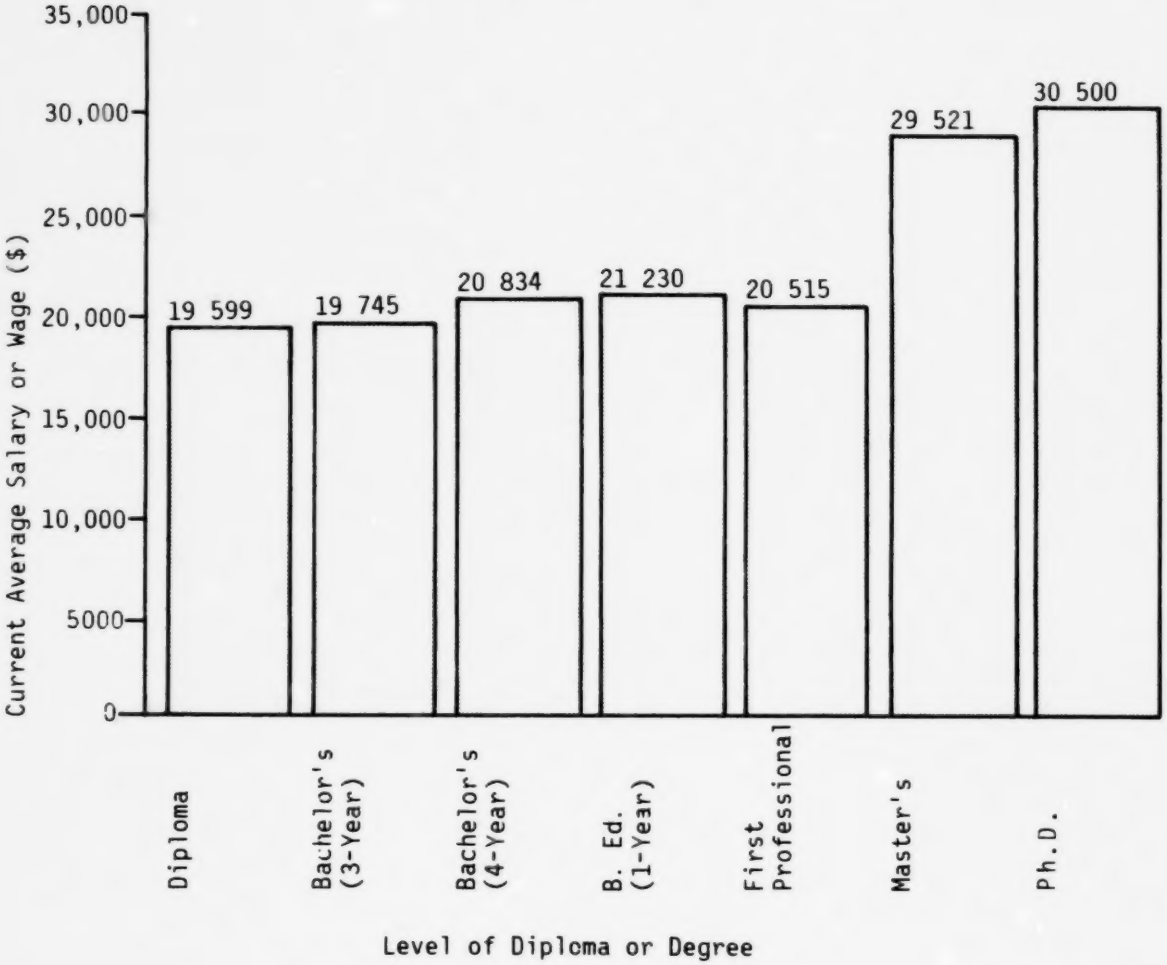
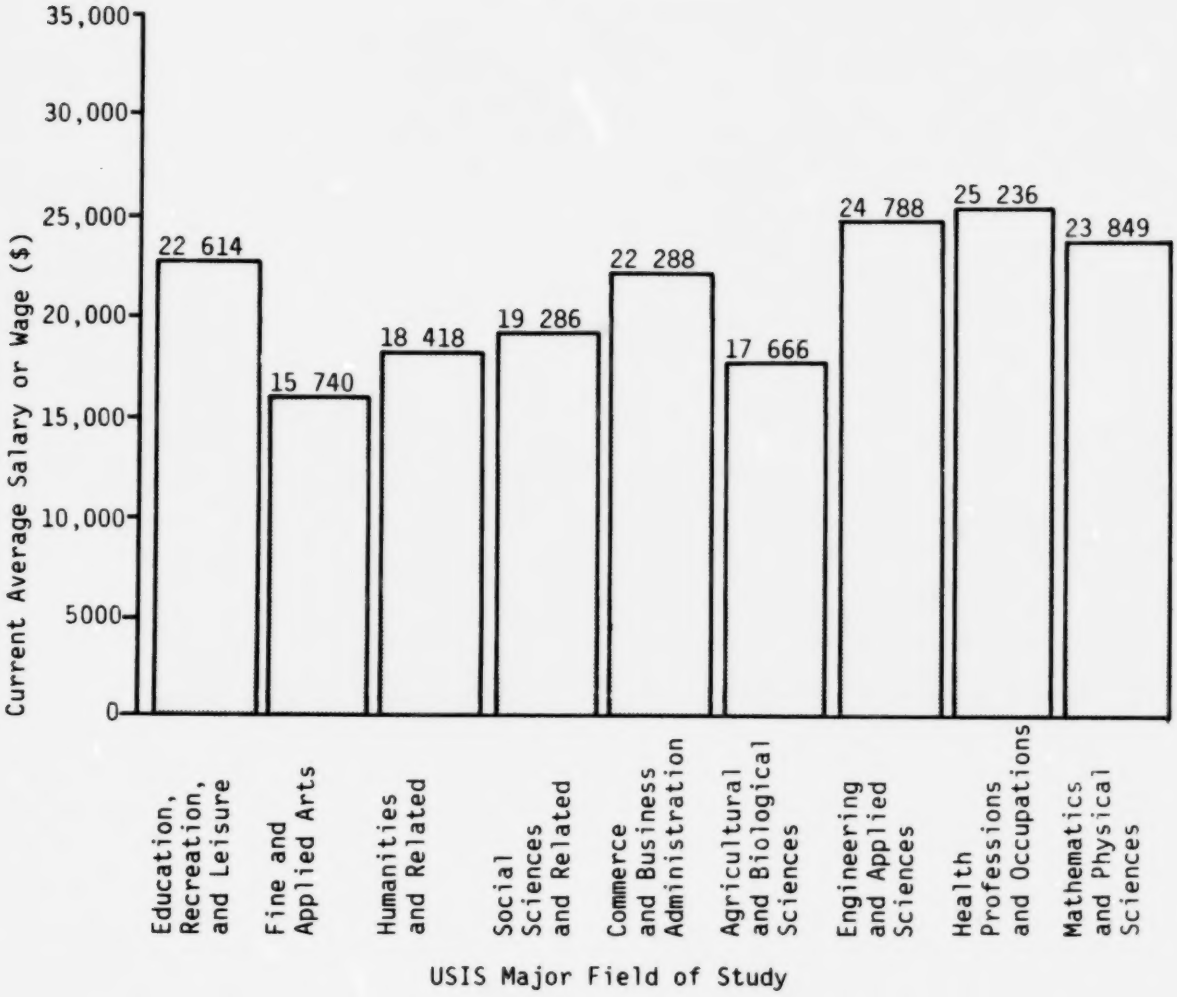


CHART 5

1982 Graduates by Current Average Salary or Wage and USIS Major Field of Study, Full-Time Employed



Overall Job Satisfaction

Generally, the 1982 spring graduates indicate a fairly high level of job satisfaction, with over 79 per cent of all graduates employed full time stating that they were satisfied with their most recent job or position. Some people appear to be more satisfied overall with their jobs than others, so that individuals and groups can be compared with one another in terms of overall job satisfaction. Here, we examine a number of such comparisons across categories of gender, level of diploma or degree, major field of study, and full- and part-time employment.

While there is some suggestion in the data that men are more satisfied overall with their jobs than women, the difference between the sexes in this regard is quite small.

Job satisfaction does appear to show some variation across levels of diploma or degree. As the data in Chart 6 show, recipients of one-year Bachelor of Education, first professional, master's, and Ph.D. degrees are all well above average in terms of overall job satisfaction, while holders of diplomas and recipients of three-year bachelor's degrees are less satisfied with their jobs overall.

Chart 7 shows that, across major fields of study, those in the health professions and occupations, and education, recreation and leisure report higher than average levels of overall job satisfaction, while persons in fine and applied arts report lower than average levels. In addition, graduates in mathematics and physical sciences show slightly higher than average levels of job satisfaction, while those in the humanities, social sciences, commerce and business administration, agricultural and biological sciences, and engineering and applied sciences indicate slightly lower than average levels.

CHART 6
1982 Graduates' Satisfaction with Current Position
and Level of Diploma or Degree, Full-Time Employed

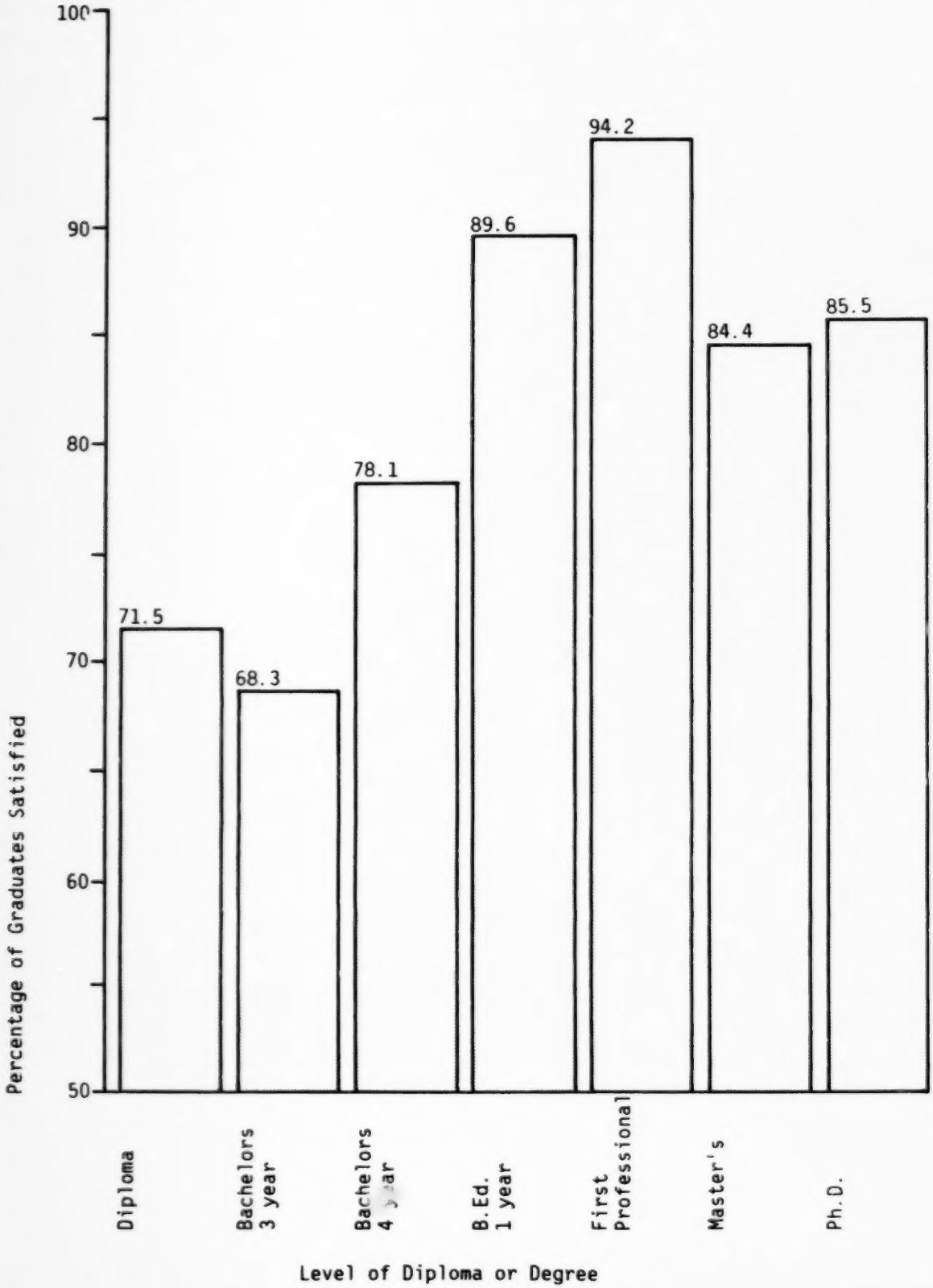
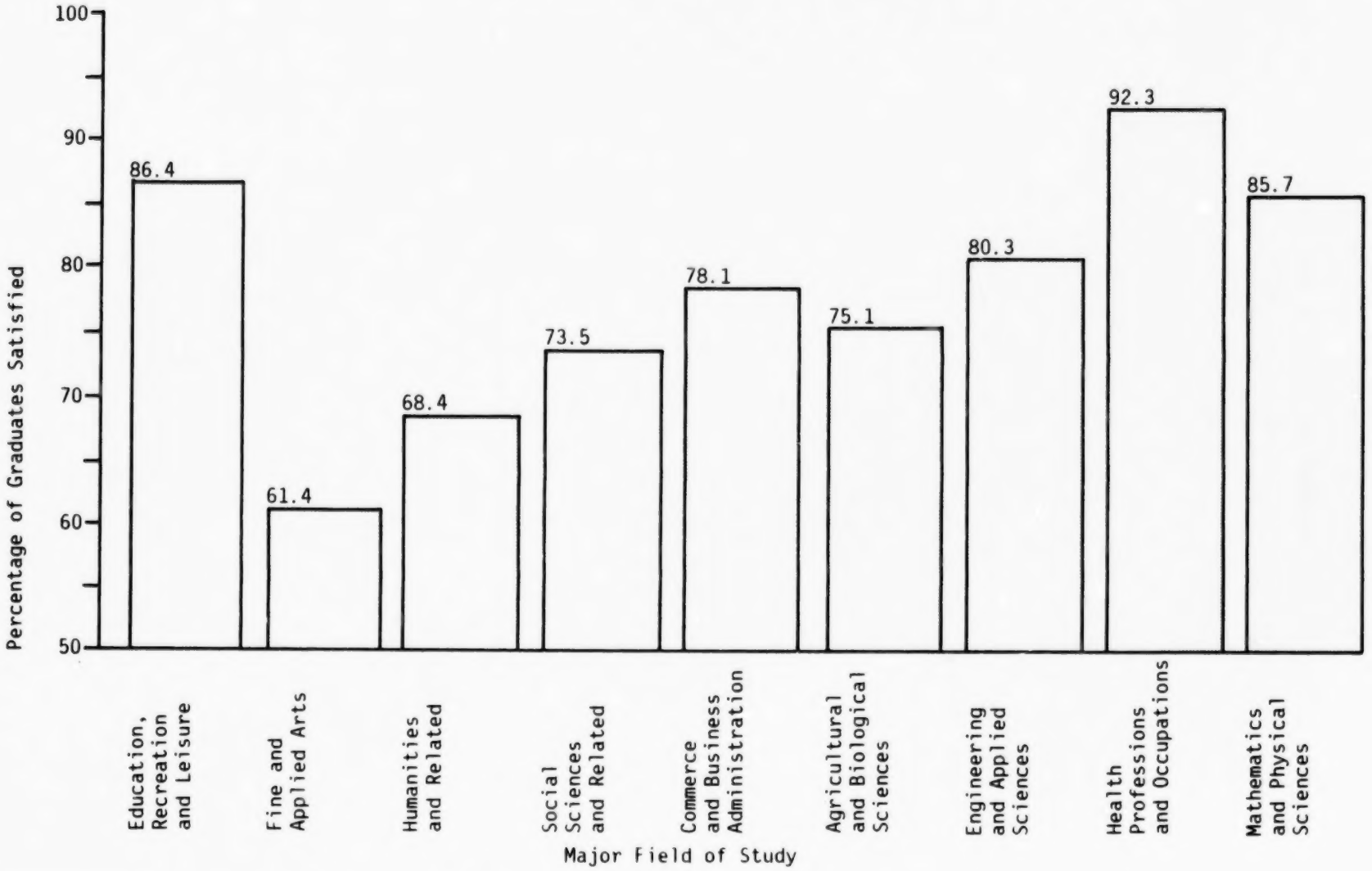


CHART 7
1982 Graduates' Satisfaction with Current Position
by Major Field of Study, Full-Time Employed



Satisfaction with Selected Aspects of Jobs

Not only can employed people be compared in terms of overall job satisfaction, they can also be compared in terms of satisfaction with different aspects of their jobs. In the employment survey of the 1982 spring graduates information was solicited on satisfaction with salary, opportunity for advancement, opportunity for personal initiative, and opportunity for experience and learning skills.

In general, the finding that men are slightly more satisfied overall with their jobs than women is reproduced in the separate findings concerning satisfaction with selected aspects of jobs. Men report higher levels of satisfaction than women with regard to salary, opportunity for advancement, opportunity for personal initiative, and opportunity for experience and learning skills. In particular, more men than women (72.5 per cent as compared with 62.7 per cent) report being either very or quite satisfied with the opportunity for advancement.

Is there a correlation between level of degree and the satisfaction graduates have with different aspects of their jobs? The diploma or degree levels which were characterized by fairly high levels of overall job satisfaction are generally the same ones which displayed high levels of satisfaction with salary, opportunity for advancement, opportunity for personal initiative, and opportunity for experience and learning skills. Two apparent exceptions to this are graduates who hold first professional degrees, who are rather less satisfied with their salaries than one might have expected from the data on overall job satisfaction, and those with Ph.D. degrees who show somewhat higher levels of satisfaction with opportunity for personal initiative than the overall measure of job satisfaction would have led one to predict.

As for major field of study, those fields which display relatively high levels of overall job satisfaction tend also to show elevated levels of satisfaction with regard to the selected aspects of jobs. One exception, however, is those graduates whose major field

was agricultural and biological sciences, who indicate a very low level of satisfaction with opportunity for advancement relative to their level of overall job satisfaction and their levels of satisfaction with other aspects of their jobs.

Migration

As we saw earlier, nine out of every ten members of the class of 1982 who were employed had jobs in Ontario at the time of the survey. There is a tendency for men to be more mobile than women. Full-time employed holders of diplomas were more likely than others to be located in Ontario in the year following their graduation; recipients of Ph.D.s were less likely to have remained in the province.

Summary

Approximately equal numbers of men and women graduate from university-level institutions in Ontario. There are gender differences, however, across level of diploma or degree, major field of study, employment status, occupation, earnings, and job satisfaction. Level of diploma or degree and major field of study are related to employment status, occupation, income, and job satisfaction. There is no evidence that among the graduates the level of education obtained by their parents systematically influences their degree or diploma choice, early career decisions, earnings, or job satisfaction. There is low migration out of Ontario among the graduates, and those who move do not seem generally to differ in terms of their educational qualifications from those who do not, although those with Ph.D.s are somewhat more likely to leave the province than others are.

Getting a Job

For most of the members of the class of 1982, finding paid employment was the next step after graduation. This section of the report describes some of the strategies respondents used in their job search and the results of their efforts, and examines the relationship between choice of strategy and gender, level of diploma or degree, and major field of study.

Contacts, Interviews, and Offers

Most of the graduates made contact with many different potential employers in searching for jobs following completion of their studies. In fact, 48.4 per cent of graduates made contact with eleven or more potential employers and 12.2 per cent with fifty or more. In turn, these contacts typically generated several job interviews: 71.8 per cent of the graduates were interviewed twice or more and 26.8 per cent were interviewed six times or more. Finally, these interviews almost always led to at least one job offer, with 40.6 per cent of the graduates receiving two offers or more.

Job-Search Strategies

In searching for a job, most of the graduates employed more than one strategy. The most common of these were:

- monitoring newspapers or other mass media for job leads
- contacting prospective employers through letters or telephone calls
- consulting on-campus placement or career-counselling services
- seeking assistance from friends or relatives

Also fairly common were making walk-in contacts with prospective employers, using off-campus Canada Employment Centres, and seeking assistance from former employers. By contrast, faculty members, private employment agencies, and co-operative or internship employers were much less frequently used in job searches.

How successful, then, were each of the job-search strategies in actually generating job offers for those who used them? The data in Chart 8 show that the most successful strategy was using co-operative or internship employers, followed by using other former employers. However, this strategy was only available to a relatively small number of graduates. The least successful strategy was using off-campus Canada Employment Centres, followed by using private employment agencies. Some 63.3 per cent of those who used co-operative or internship employers reported receiving a job offer by this means; 23.1 per cent of those who used a Canada Employment Centre reported receiving a job offer as a result.

In general, there was little difference in the job-search strategies used by men and women. Some differences worth noting include:

- The most common strategy among men was using on-campus placement or career-counselling services.

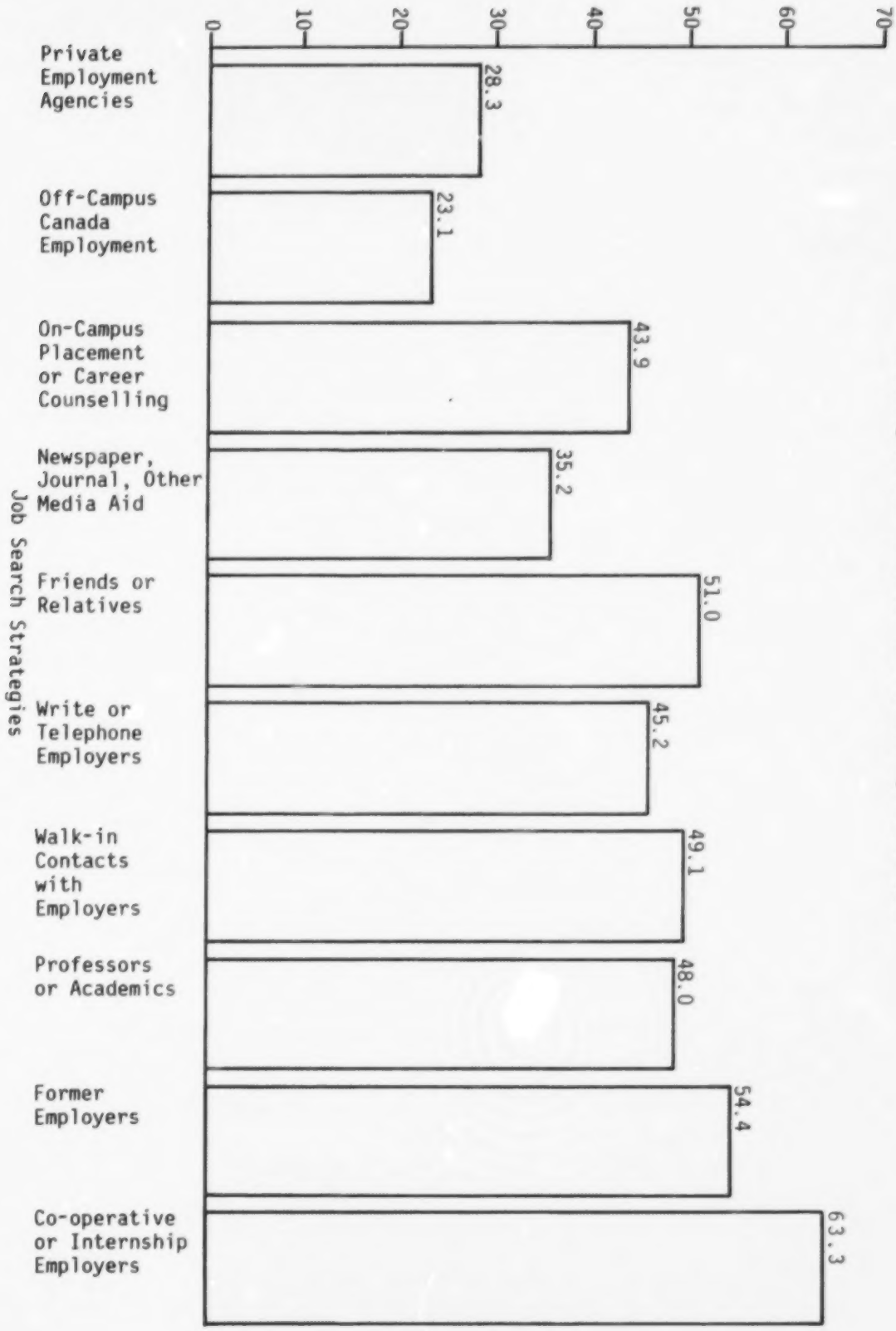
- The most common one among women was using newspaper or other media advertisements.

- Men were more likely than women to use on-campus placement or career-counselling services.

- Women were more likely than men to use newspaper or other media advertisements or to write or telephone prospective employers.

CHART 8

Percentages of 1982 Graduates Using Selected Job Search Strategies Who Received Job Offers by that Means



Job-search strategies which are the most successful for men tend to be the same ones which are the most successful for women. However, there are some differences between the sexes in the success rate associated with certain strategies. Using co-operative or internship employers was the most successful means for both sexes, followed by using former employers. Using off-campus Canada Employment Centres was the least successful means for both. At the same time, men who used on-campus placement or career-counselling services or co-operative or internship employers were considerably more successful than women, while women who used private employment agencies or who had walk-in contacts with prospective employers fared markedly better than did men.

Job-search strategies of the graduates differ somewhat across degree levels. Holders of first professional and Ph.D. degrees did not rely on most of the strategies listed except for using faculty members (Ph.D.'s) and co-operative or internship employers (first professional). Holders of diplomas and bachelor's degrees (three- or four-year, including the one-year Bachelor of Education) used employment or career-counselling agencies more. Recipients of one-year Bachelor of Education degrees did not use private employment agencies. Holders of master's degrees were fairly heavy users of private agencies.

The above describes the most common strategies used by graduates in searching for a job. However, the success in obtaining job offers by various approaches may be of more interest to prospective job seekers. Tables 4 and 5 highlight this success and provide further details.

Table 4:
1982 Spring Graduates by Level of Diploma or Degree and the Percentage of Job Offers to Approach Used in the Employment Search

Approach Used	Level of Diploma or Degree*							
	Diploma	Bachelor's (3 year)	Bachelor's (4 year)	B.Ed. (1 year)	First Professional	Master's	Ph.D.	Other	Total
Private Employment Agencies	24.7	36.9	22.3	42.2	40.0	27.3	17.5	33.0	28.3
Off-Campus Canada Employment Centres	21.5	27.2	21.2	18.8	22.5	20.4	16.5	30.3	23.1
On-Campus Placement/ Career Counselling Services	40.8	30.2	48.4	31.0	81.3	51.3	33.8	38.3	43.9
Newspaper/Journal Media Ads	32.2	34.8	31.4	44.4	34.3	42.6	38.8	21.5	35.2
Friends or Relatives	56.9	51.7	49.5	49.5	62.2	49.7	70.4	76.7	51.0
Write/Telephone Employers	43.6	36.9	40.6	58.8	79.3	49.2	62.3	51.9	45.2
Walk-in Contact With Employers	49.1	46.5	46.3	57.4	65.2	55.2	63.2	68.9	49.1
Professors and/or Academics	43.9	39.1	48.0	47.3	63.6	53.7	62.6	50.0	48.0
Former Employers	56.6	54.0	53.9	51.7	64.4	57.8	70.8	60.7	54.5
Co-op/Internship Employers	52.1	53.9	67.5	50.6	68.3	63.2	68.1	0.0	63.3

* Columns may not sum to 100.0 per cent because more than one strategy and more than one job offer were often involved. The percentage means the rate of job offers by contacts made for each strategy.

Table 5:
1982 Spring Graduates by USIS Major Field of Study and the Percentage of Job Offers to Approach Used in the Employment Search

Approach Used	USIS Major Field of Study*									
	Edu. Rec. & Lei.	Fine & Appl. Art	Humani-ties & Rel.	Soc. Sc. & Rel.	Comm. & Bus. Admin.	Agri. & Bio. Sc.	Eng. & Appl. Sc.	Health Prof. & Occ.	Math. & Phys. Sc.	Total
Private Employment Agencies	38.5	29.2	38.6	36.2	23.1	20.9	16.1	53.7	24.0	28.3
Off-Campus Canada Employment Centres	22.8	32.4	28.0	26.3	18.2	23.4	13.1	20.6	19.3	22.8
On-Campus Placement/ Career-Counselling Services	30.6	37.5	27.1	28.9	59.1	30.0	55.2	74.5	53.3	43.9
Newspaper/Journal Media Ads	44.4	33.1	34.2	35.9	33.2	28.1	21.4	52.4	29.3	35.2
Friends or Relatives	52.4	60.3	51.7	52.4	46.3	55.7	42.2	57.1	51.1	51.0
Write/Telephone Employers	56.2	44.9	37.3	45.4	34.5	44.6	35.4	74.4	37.7	45.4
Walk-in Contact with Employers	57.3	54.2	50.9	45.4	39.0	52.9	36.7	70.7	40.9	49.1
Professors and/or Academics	46.0	49.8	49.1	44.8	37.4	57.7	42.9	59.8	56.2	48.2
Former Employers	55.9	56.1	54.6	54.6	51.6	53.5	51.8	70.2	56.1	54.5
Co-op/Internship Employers	53.8	57.5	48.8	54.1	65.6	50.0	63.1	75.5	79.4	63.3

*Columns do not sum to 100.0 per cent because more than one strategy and more than one job offer was often involved. The percentage means the rate of job offers by contacts made for each strategy.

Further Assistance

As part of the survey, the 1982 graduates were asked to indicate the extent to which they could have used further assistance in their job search with regard to career counselling, preparing résumés, developing interview skills, using job-search techniques, and obtaining actual job leads. At the top of the list was obtaining actual job leads, followed closely by developing interview skills and using job-search techniques. Preparing résumés and career counselling were low on the list. In every case, however, quite substantial numbers of the graduates indicated that some further assistance would have been useful.

Summary

The members of the class of 1982 typically employed several different strategies in searching for jobs. Overall, assistance from co-operative or internship employers or former employers was the most successful strategy, while assistance from off-campus Canada Employment Centres and private employment agencies were the least successful ones. What worked for men did not always work as well for women, and the converse was true. Specifically, those men who used on-campus services or co-operative or internship employers as sources of assistance were more successful than women who did so, while those women who used private employment agencies or who made walk-in contacts with prospective employers fared much better than did men. In addition, graduates at different diploma or degree levels and with different major fields of study also differed in the sources of assistance which they used and in the success which they had with each, although these findings defy simple summary. Finally, large numbers of graduates reported that they could have used further assistance of several kinds in their job search, especially in obtaining actual job leads, developing interview skills, using job-search techniques, but also in career counselling and preparing résumés.

Educational Qualifications and Job Requirements

Equipped with different levels of diplomas or degrees in different fields of study, university-level graduates typically enter the labour market to compete for jobs in which the educational requirements and the graduate's own qualifications may be high or low, general or job-specific. The 1982 graduate employment survey included a number of questions designed to measure different aspects of the articulation between educational qualifications and job requirements.

Some 87.1 per cent of the graduates had completed programs of study in which the general skills involved were at least somewhat related to their jobs; 5.4 per cent had come from a program in which the general skills involved were "not at all related". No differences were evident here between men and women, since approximately equal proportions of men and women indicated that the general skills involved in their major fields of study were at least somewhat related to their jobs. Moreover, there was no evidence that men and women graduates differ in regard to the match of their educational qualifications and the requirements of their jobs. As the data in Chart 9 indicate across the several levels, holders of one-year Bachelor of Education, first professional, and Ph.D. degrees stand out in terms of the relatively high percentages who reported that their major fields of study involved general skills relevant to their jobs. Graduates of three-year bachelor's programs scored low in this respect. Regardless of what measure is used to gauge the match between people's educational qualifications and their jobs, graduates with one-year Bachelor of Education and first professional degrees were above average while graduates from three-year bachelor's programs were below average. There are some additional findings which should be noted:

- Holders of diplomas resemble recipients of three-year bachelor's degrees in terms of the disproportionate numbers with jobs in which no diploma or degree was either required or preferred.

- Holders of diplomas and graduates with master's degrees are, along with the three-year bachelor's graduates, above average among those employed in jobs where the required or preferred level of diploma or degree is something other than the one they have.

Chart 10 shows that graduates in fine and applied arts, humanities, and social sciences are below average among those who see the general skills involved in their fields as relevant to their jobs, while graduates in health professions and occupations are above average. No matter what question is used to measure the match between educational qualification and job requirements, graduates in fine and applied arts, humanities, and social sciences stand relatively low in terms of relevance, while those in health professions and occupations stand relatively high. In addition, graduates in engineering and applied sciences rank comparatively high in terms of the match between degree level and major field and employer requirements or preferences.

Finally, graduates employed full time, as compared to graduates employed part time, are engaged in paid employment in which the general skills obtained in their programs of study appear to them as relevant to their jobs. Similarly, the data on qualifications needed for employment uniformly indicate that those graduates employed full time more than those employed part time have work which matches their educational qualifications.

CHART 9

1982 Graduates by Level of Diploma or Degree
With Jobs Related in General Skills to Major
Field of Study, Full-Time Employed

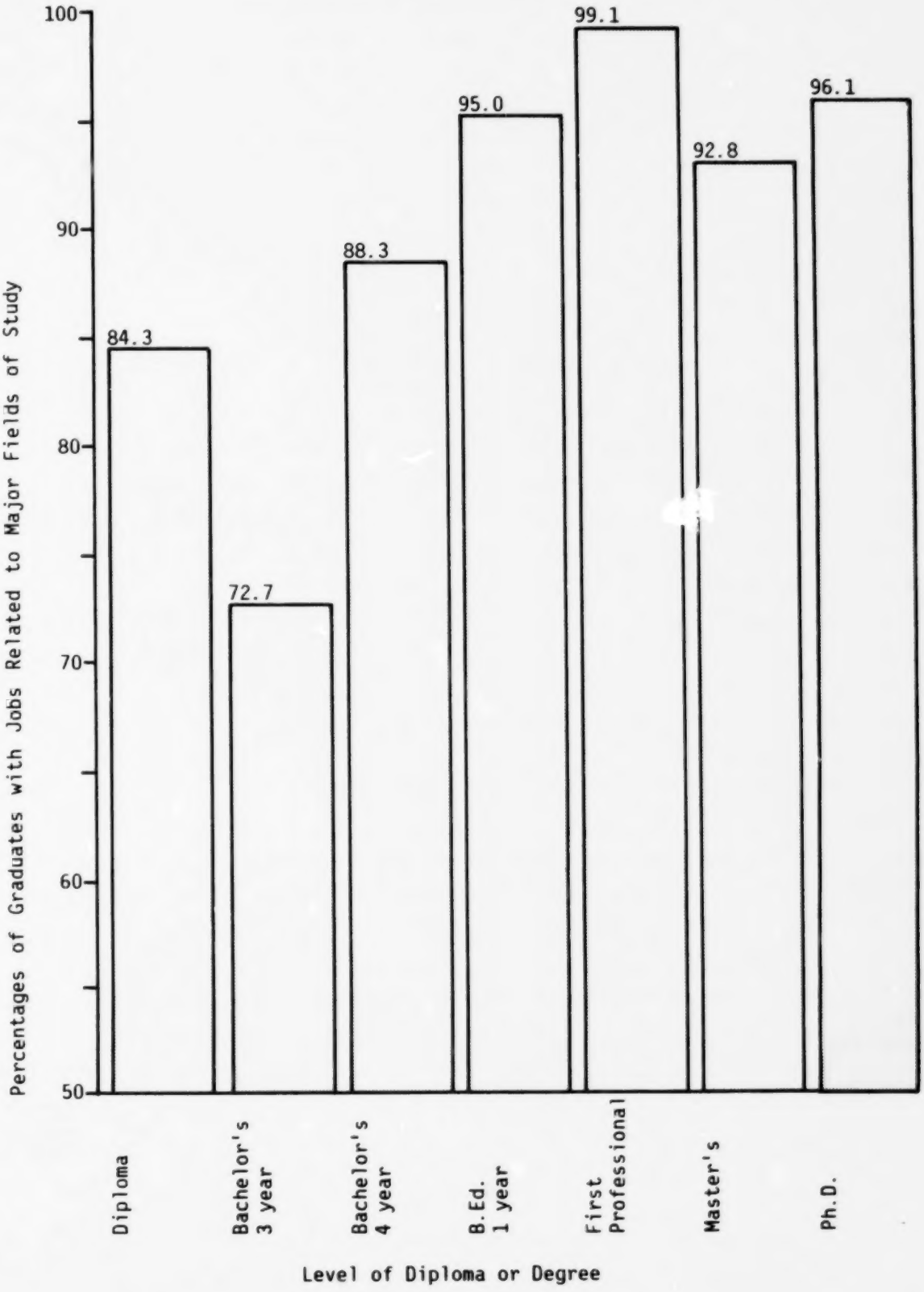
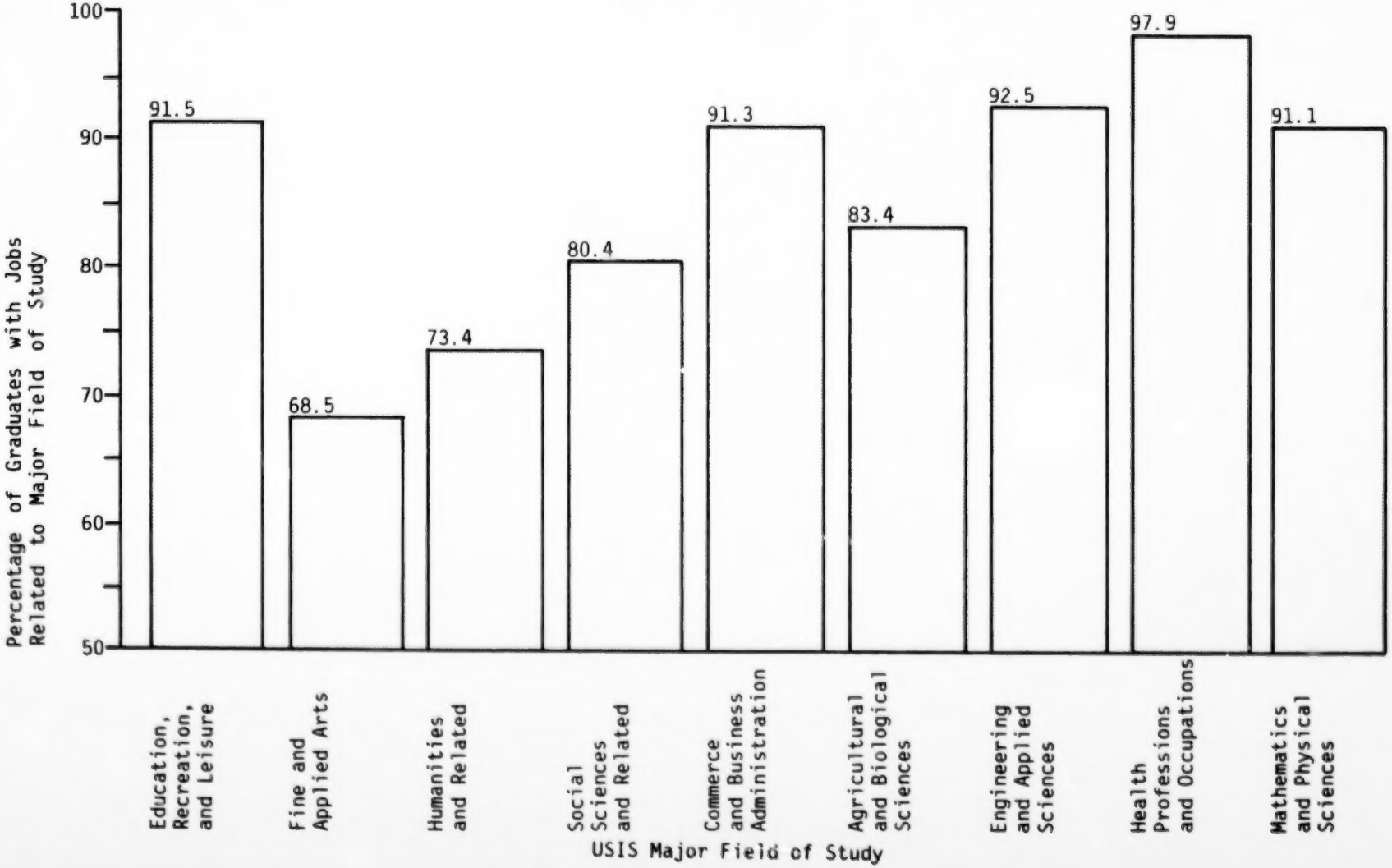


CHART 10
1982 Graduates by USIS Major Field of Study With Jobs Related in General Skills to Major Field of Study, Full-Time Employed



Summary

Holders of three-year bachelor's degrees were prominent among those whose educational qualifications did not appear to relate very closely to their jobs, while recipients of one-year Bachelor of Education and first professional degrees stood out among those whose qualifications did seem to relate closely to their jobs. In addition, graduates in fine and applied arts, humanities, and social sciences had less success in translating their educational qualifications into jobs in their fields, while those in health professions and occupations did well in this regard. Those in engineering and applied sciences fared well on several measures of job relevance and poorly on none.